

AMENDMENTS TO THE CLAIMS

1. (currently amended): A polyurethane dispersion comprising consisting of a mixture polyurethane prepolymer produced from the reaction of an excess of a polyisocyanate and a molecule having hydrogen active moieties, optionally a chain extender and/or, and optionally a surfactant, wherein the polyisocyanate comprises consists of (i) trans-1,4-bis(isocyanatomethyl)cyclohexane or (ii) an isomeric mixture of two or more of cis-1,3-bis(isocyanatomethyl)cyclohexane, trans-1,3-bis(isocyanatomethyl)cyclohexane, cis-1,4-bis(isocyanatomethyl)cyclohexane and trans-1,4-bis(isocyanatomethyl)cyclohexane, with the proviso said isomeric mixture comprises at least about 5 weight percent of said trans-1,4-bis(isocyanatomethyl)cyclohexane a bis(isocyanatomethyl)cyclohexane compound.

2. (canceled)

3. (currently amended): The dispersion of Claim [[2]] 1 wherein the polyurethane is dispersed in an aqueous medium.

4. (original): The dispersion of Claim 3 wherein the aqueous medium contain less than 5 percent residual organic solvent.

5. (original): The dispersion of Claim 1 wherein the molecule having hydrogen active moieties is a polyol or polyol blend having a weight average molecular weight of 300 to 10,000 and an average functionality of 1.8 to 4.5.

6. (original): The dispersion of Claim 5 wherein the polyol is an aliphatic or aromatic polyol selected from a polyester, a polyether, polylactone, polyolefin, polycarbonate or a blend thereof.

7. (original): The dispersion of Claim 1 wherein the dispersion contains a polyamine chain extender.

8. (original): The dispersion of Claim 7 wherein the chain extender is selected from piperazine, ethylenediamine or bis(aminomethyl)cyclohexane.

9. (original): The dispersion of Claim 1 wherein the dispersion contains 30 to 75 weight percent solids.

10. (original): The dispersion of Claim 1 wherein the dispersion contains an anionic, ionic, cationic or zwitterionic external surfactant.

11. (original): The dispersion of Claim 1 wherein the dispersion is stabilized by means of an internal surfactant.

12. (canceled)

13. (original): A coating, film, elastomer or microcellular foam produced from the dispersion of Claim 1.

14. (original): A ultraviolet or light stable coating, film or elastomer produced from the dispersion of Claim 1.

15. (currently amended): The dispersion of claim [[2]] 1 wherein the polyisocyanate contains 0.1 to 20 percent by weight of at least one polyisocyanate other than bis(isocyanatomethyl)cyclohexane.

16. (new): A polyurethane dispersion consisting essentially of a polyurethane prepolymer produced from the reaction of an excess of a polyisocyanate and a polyol having a weight average molecular weight of 300 to 10,000 and an average functionality of 1.8 to 4.5, optionally a chain extender and optionally a surfactant, wherein the polyisocyanate comprises a bis(isocyanatomethyl)cyclohexane compound, and wherein the polyol is an aliphatic or aromatic polyol selected from a polyester, a polyether, polylactone, polyolefin, polycarbonate or a blend thereof.

17. (new): A polyurethane dispersion comprising a polyurethane prepolymer produced from the reaction of an excess of a polyisocyanate and a molecule having hydrogen active moieties, optionally a chain extender and optionally a surfactant, wherein the polyisocyanate comprises a bis(isocyanatomethyl)cyclohexane compound, wherein the dispersion comprises 30 to 75 weight percent solids, and wherein the solids comprise particles having a mean particle size of less than about 5 microns.

18. (new): The dispersion of any of claims 1, 16 or 17 further comprising tertiary amines, organometallic compounds and mixtures thereof.

19. (new): The dispersion of any of claims 1, 16 or 17 further comprising from about 0.01 to about 0.5 parts organometallic compounds per 100 parts polyurethane prepolymer, by weight.